Central Hudson Cost Estimates for Infrastructure Upgrades/Modifications

Typical System Modifications – Substation

Upgrade/Modification	High Level Description	Cost Estimate
3V0 (Overvoltage) Protection	Install substation high-side potential transformer (PT) and relaying; Limited field implementation and substations that require 3V0	$90,000-$110,000
Substation Load Tap Changer (LTC) Upgrade	Setting changes up to controller replacements	$15,000-$60,000
Substation Regulator Upgrade (non-LTC)	Limited number of substations that require full regulator replacement	$100,000-$140,000
Reclose Blocking on Substation Breaker	For single phase feeder PT installations	$25,000

Typical System Modifications – Distribution

Upgrade/Modification	High Level Description	Cost Estimate
Overhead Line Reconductoring/Extension	$/mile for three-phase reconductoring or line extension	$500,000-$800,000
Recloser Upgrade/Installation	Installation of electronic recloser with disconnects and controls	$65,000-$75,000
Monitoring & Control (M&C) Equipment for Projects 50kW up to 500kW	Based on estimates, no field implementation to date unless point of common coupling (PCC) electronic recloser required	$21,000-$40,000
M&C Equipment for Projects 500kW and Greater	PCC electronic recloser with communications and controls	$65,000-$75,000
Reclose Blocking on Mid-Line Reclosers	Setting changes up to new electronic recloser installation	$1,000-$75,000
Direct Transfer Trip (DTT)	Utilizing cellular based technology where low speed tripping is acceptable and PCC electronic recloser is already separately required	$3,000-$10,000
Line Voltage Regulators	New three-phase, bi-directional regulator with controls	$70,000-$80,000
Switched Capacitor Bank	New three-phase capacitor bank with controls	$25,000-$35,000
New Primary Metered Service	Install new pole (for take-off) and three-phase primary meter cluster on customer-owned pole	$15,000-$25,000